

# TRIAGE

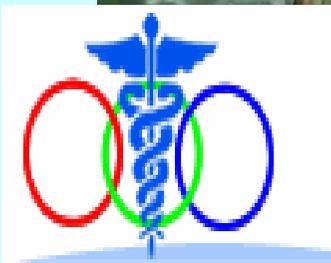
Italian nurse training program

**KUNMING – CHINA**  
April, 8 – 10th 2010



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Nursing  
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# The nurse triage activity is a crucial tool for the management of an Emergency Department

## Target

- What's triage?
- Which kind of triage?
- Why do we need triage?
- How do we perform triage?
- Who should perform triage ?
- Which kind of triage training for nurses?

I come from ..

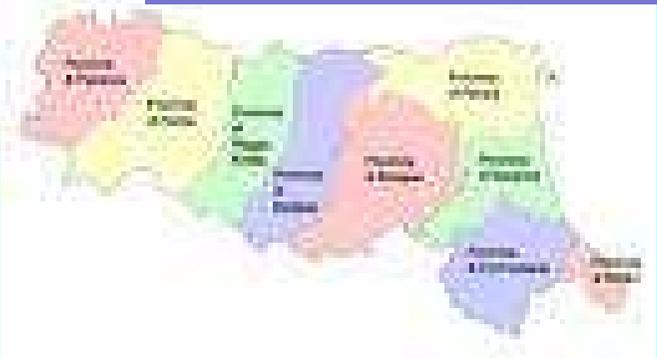


Europe



Italy

Emilia Romagna



I live in Modena city

.. Ferrari was born in Modena..

.. but this car is not mine ..

.. and my job is  
Nurse Coordinator  
in the emergency  
room and..

National Coordinator SIMEU  
Area Nursing  
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Emergency department is on around  
the clock, seven days a week

The patient start his health care  
process meeting the nurse and  
answering to the questions about  
what's happened...

How I can help you?



# The triage



## What's triage?

Triage is a term derived from the French verb "trier" that means to "choose"

It's the process by which patients are classified according to the type and urgency of their conditions to get the Right patient to the

Right place at the

Right time with the

Right care provider

Which kind of triage?

Goals of the report

**Emergency:** To provide the best care for each individual patient.



**Mass casualty/disaster:**

To provide the most effective care for the greatest number of patients.



Why do we need triage?

Triage in the Emergency Room:  
imbalance between number of patient  
and treatment capacity

Time factor \ Factor Resources \ Sustainability  
Necessary to make choices!



**..among the people coming to emergency department... is necessary to**

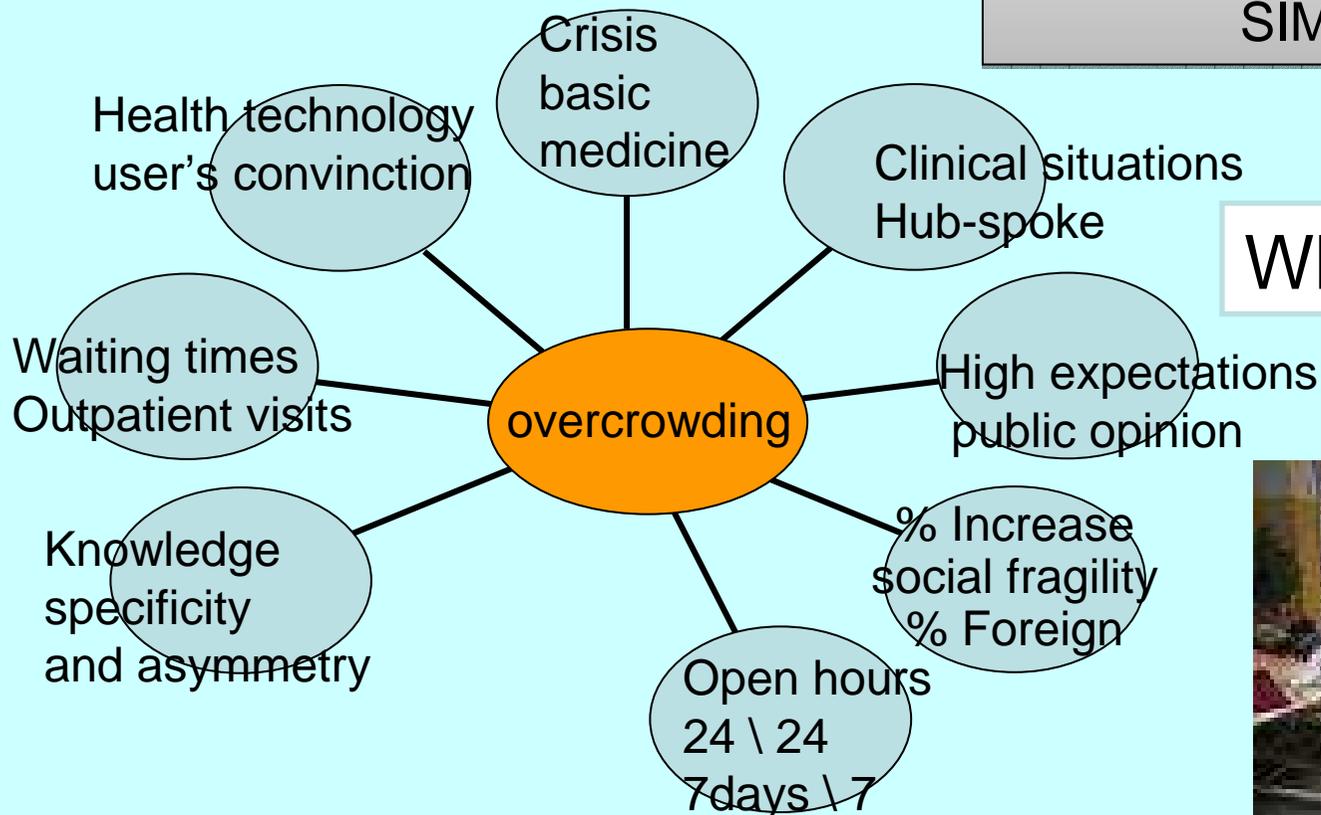
**Identify immediately people with life threatening problems**



## Why do we need triage?

.. despite the mandate of Emergency Care System: clinical urgency and emergency ... in 60% of First Aid treatment these features are absent.

Last 10 years access to the emergency room increased by 50%, 30 million in Italy in 2008  
SIMEU, 2009



### What causes it?



## How to triage?

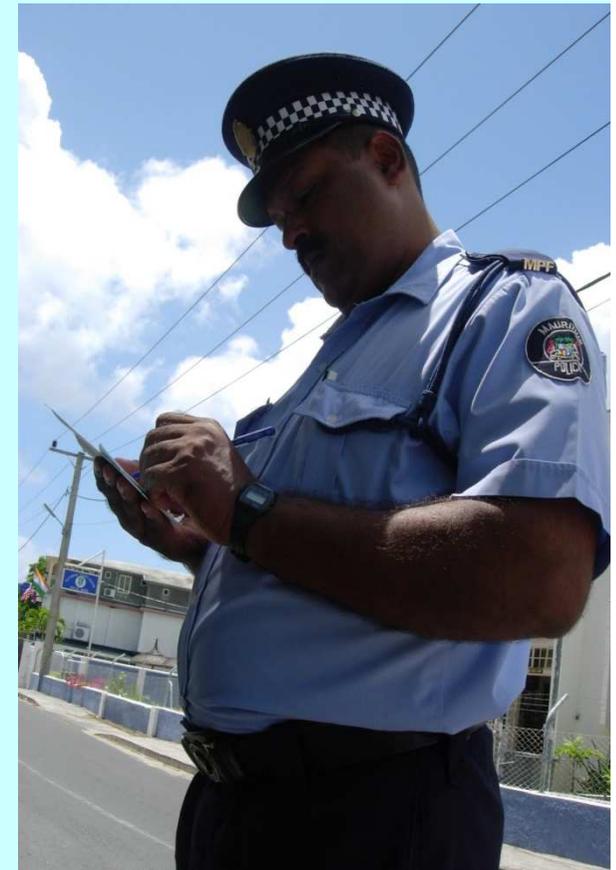
**Thompson and Dains (1982) identified the three most common types of triage systems:**

- Traffic director
- Spot-check
- Comprehensive triage

How to triage?

# Traffic director is the easiest type of system

A non clinical employee greets the patient and directs him to a treatment area or waiting room based on their initial impression. By 2002, this type of system no longer worked effectively.



How to triage?

# Spot-check triage system

is appropriate for a low volume emergency department where it is not cost effective to always have an RN at triage since patients do not need to wait.

Instead, a registration person greets the patient and pages the triage nurse when a patient presents.

The RN then determines patient critically condition based on a brief triage assessment.

Patient assessment is a nursing function that cannot be delegated to less qualified personnel.



How to triage?

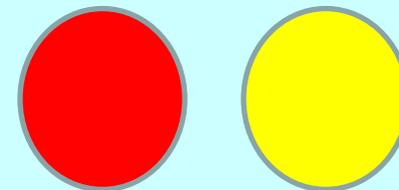
# Comprehensive triage, the most advanced system

has continued to evolve in the worldwide emergency department. The emergency nurse triages each patient and determines the priority of care based on physical, developmental and psychosocial needs as well as factors influencing access to health care and patient flow through the emergency care system.



## How to perform triage?

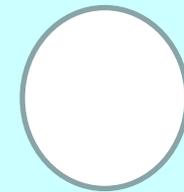
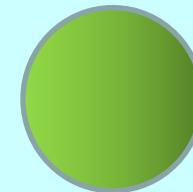
The purpose of emergency department (ED) triage is to prioritize incoming patients and to identify those patients who cannot wait to be seen. The experienced triage nurse is able to rapidly and accurately identify the small percentage of patients requiring immediate care.



## How to perform triage?



Then the triage nurse has to face the remaining large number of patients who do not require immediate treatment and can wait for physician evaluation.



How to perform triage?

# Triage Levels

2 Levels	3 Levels	4 Levels	5 Levels
<ul style="list-style-type: none"><li>• Emergent</li><li>• Non-emergent</li></ul>	<ul style="list-style-type: none"><li>• Emergent</li><li>• Urgent</li><li>• Nonurgent</li></ul>	<ul style="list-style-type: none"><li>• Life-threatening</li><li>• Emergent</li><li>• Urgent</li><li>• Nonurgent</li></ul>	<ul style="list-style-type: none"><li>• Resuscitation</li><li>• Emergent</li><li>• Urgent</li><li>• Nonurgent</li><li>• Ambulatory</li></ul>

## How to triage?

There are well-validated and reliable five-level triage systems that have become the standard in other countries.



System	Countries	Levels	Patient should be seen by provider within
<b>Australasian Triage Scale (ATS)</b>	<b>Australia New Zealand</b>	1 - Resuscitation 2 - Emergency 3 - Urgent 4 - Semi-urgent 5 - Nonurgent	Level 1 - 0 minutes Level 2 - 10 minutes Level 3 - 30 minutes Level 4 - 60 minutes Level 5 - 120 minutes
<b>Canadian Triage and Acuity Scale</b>	<b>Canada</b>	1 - Resuscitation 2 - Emergency 3 - Urgent 4 - Less Urgent 5 - Nonurgent	Level 1 - 0 minutes Level 2 - 15 minutes Level 3 - 60 minutes Level 4 - 120 minutes Level 5 - 240 minutes
<b>Manchester</b>	<b>England Scotland</b>	1 - Immediate (red) 2 - Very urgent (orange) 3 - Urgent (yellow) 4 - Standard (green) 5 - Nonurgent (blue)	Level 1 - 0 minutes Level 2 - 10 minutes Level 3 - 60 minutes Level 4 - 120 minutes Level 5 - 240 minutes
<b>ITALY</b>	<b>ITALY (national legislation)</b>	1 - Immediate (red) 2 - life treating potential rapidly changing (yellow) 3 - urgent (green) 4 - Nonurgent (white)	Level 1 - 0 minutes Level 2 - 10 minutes Level 3 - 60 minutes Level 4 - 240 minutes
<b>ITALY</b>	<b>Many regions like Piemonte</b>	1 - Immediate (red) 2 - Very urgent (yellow) 3 - Urgent (light green) 4 - Urgent (dark green) 5 - Nonurgent (white)	Level 1 - 0 minutes Level 2 - 10 minutes Level 3 - 30 minutes Level 4 - 60 minutes Level 5 - 240 minutes

**How to perform triage?**

The **objective** of this work\* is to **analyze the different models of triage** applied and known nationally and internationally, according to two different perspectives

methodological features used in the evaluation process, with the ultimate goal of comparing the key features, common points and differences of substance, the second concerns the **analysis of the role of knowledge**, special training and experience to support nursing decisions triage, determining whether one or other characteristic have a determining influence on the evaluation process.

We found **127 articles** about the validity and reliability of nursing triage

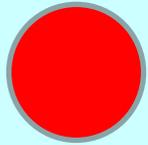
Databases, including PubMed, China, has focused on time to research the implementation of guidelines, **published between 2003 and 2008** in original language

**Conclusion:** the review of studies shows **no significant differences** in various systems of triage for admission of patients in **most urgent levels.**

UNIVERSITY OF ROME  
"Tor Vergata"  
SCHOOL OF MEDICINE  
AND SURGERY  
Master of Science in Nursing  
and Obstetrics  
Bassoli M.;Alvaro R; et all  
ACADEMIC YEAR 2008/2009

How to triage?

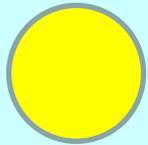
# Nursing triage model



EMERGENCY



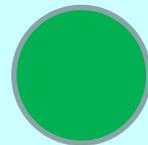
IMMEDIATELY



VITAL FUNCTION PRESENT  
– VERY URGENT -  
POTENTIAL CHANGING TO  
EMERGENCY



< 10 MINUTES



VITAL FUNCTION PRESENT  
– STRONG PRESENT -  
URGENT PROBLEM



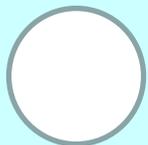
GENERAL  
DISCRIMINATOR  
S



< 30  
MINUTES



< 60  
MINUTES



AMBULATORY PROBLEM  
(GP OR FAST TRACK)



NO TIME

### 5. 离开医院之前……

#### 挂号费 (Ticket)

请检查自己的身份资料以及阅读急救中心门诊报告下方的备注

挂号费 (Ticket) 免	挂号费 (Ticket) 是
免费治疗	需缴交挂号费

**重要信息:** 如果属“挂号费 是”的情况, 离院前需缴付所有的检查费用和诊治费用

如果您认为自己属**免费治疗者** (年收入和/或病情和/或残疾), 需填写免费治疗**自我证明表格** (Modulo di Autocertificazione)。

#### 药房

可以在医院的内部药房领取药物, 药房的开放时间如下:

星期一-星期五 工作日	星期六 假日前
9.00-12.30    13.00 - 16.00	9.00-13.00

有用号码		医
Triage	0535/602295	急救中心传真号
社工服务处	0535 / 229691-2	Modena 区工伤 059/884411
值班医生	0535 / 602280	电话和约会

请留意:

急救中心**不**负责别处开写的伤口换药, 伤口除

医务人员随时为您解答

我们需要你们的合作

SERVIZIO SANITARIO REGIONALE  
EMILIA-ROMAGNA  
Azienda Unità Sanitaria Locale di Modena  
Dipartimento Emergenza - Urgenza

Ospedale di Mirandola  
Pronto Soccorso  
急救中心

尊敬的女士先生, 本资料向您解释在您来到我们科之后所发生的事情以及向您提供一些有用的信息。

#### 1. 选择以及颜色代码

到达急救中心的病人由一位受过专门训练的专业护士, 即**鉴定护士**接待, 其根据医疗负责人制订的诊治协议来识别病人的紧急情况。

这种处理程序叫 **TRIAGE** (“选择分类”的意思), 其目的是根据病人的病情来确定接受诊治的紧急程度, 以便给病人

#### 您的颜色代码为斜线选择那种

-  **红色代码.** 最严重的病情, 有即时的生命危险。急救中心马上将病人安排在急诊室, 正在进行的诊治工作有可能延缓和/或中断。领到这种代码的病人马上接受诊治, 等候厅会出现“**紧急救治正在进行**”的字样
-  **黄色代码.** 领到这种代码的病人病情严重, 有可能出现生命功能变异和/或病情变坏以导致生命危险。医务人员尽量将等候时间减至最短。
-  **绿色代码.** 可以延迟的情况。病人无生命危险, 在处理完更紧急的病例后接受诊治。
-  **白色代码.** 非紧急情况。可由家庭医生或值班医生解决。无论如何, 急救中心也可以接待这种病人, 但仅在处理完其它的紧急病例 (红色、黄色和绿色代码) 后才可对其诊治, 其等候时间也可能很长。

#### 2. 等候诊治

不能马上接受诊治的病人, 根据不同的病情, 应在外面的等候厅或专门的地方等候。医务人员根据颜色代码, 以不同的方式定期地对病人的病情进行评估: **请与我们配合, 将您认为重要的病情变化及时通知我们。** 如果等候时间延长, 有可能是因为在您前面有危急程度更高的病人。

#### 3. 诊治与在急救中心的逗留时间

有可能需要病人同意及签名接受**某些确诊检查和/或治疗。** 为完成一个适当的诊断-治疗过程, 有时需要在急救中心内的一个指定的地点接受**观察。** 只有病人才可进入**急救中心**, 除非未成年人需家长陪伴。医务人员仅可为诊病原因, 根据急救中心的病人拥挤情况以及维护他人的隐私权的前提下允许病人进入。

诊治区		
1号诊所 “ <b>急诊室</b> ”	2号诊所 (5号区) “ <b>诊断和观察</b> ”	3号诊所 “ <b>急诊</b> ”

#### 通往放射科和骨科的指示线

地面标有通往放射科 (红色) 和骨科 (黄色) 的指示线, 以便病人能独立找到这些地方。

#### 4. 诊断/治疗结束后

- 在**诊断/治疗**结束后, 病人可以:
- **出院回家:** 急救中心将留给病人一份写有药方的急救中心就诊报告。病人凭此报告可在服务时间内前往医院的药房领药。重要的是应保存好此报告并尽快给自己的家庭医生看。
  - 在本院或其它医院**住院留医。**

..should be informed about waiting times..

Which kind of triage training for nurses?

# Training Triage course

- General introductions
- Introduce modules aim
- The 'Triage' concept
- The ABCD concept
- The priority signs concept
- The emergency and priority Signs
- The general principles of treatment of emergencies

Which kind of triage training for nurses?



DO NURSES NEED EXPERIENCES BEFORE PERFORMING TRIAGE IN ED?

Yes, we think that after the basic university training all new nurses need to work hard to develop a deep knowledge about signs and symptoms in emergency patient (following guidelines, procedures, prothocols)

The average time before triage training takes 1 to 2 years

# The evolution of training and regulation of the nursing profession in Italy



MINISTERIAL DECREE April 2, 2001 (SO No. 136 Published in the Official Gazette No. 128 of June 5, 2001)  
 Determination of classes for graduate college of health professions

## Numerazione e denominazione delle classi delle lauree specialistiche

N° classe

1/S

Denominazione

**Classe delle lauree specialistiche nelle scienze infermieristiche e ostetriche**

Allegato

1

2/S

Classe delle lauree specialistiche nelle scienze delle professioni sanitarie della

2

3/S

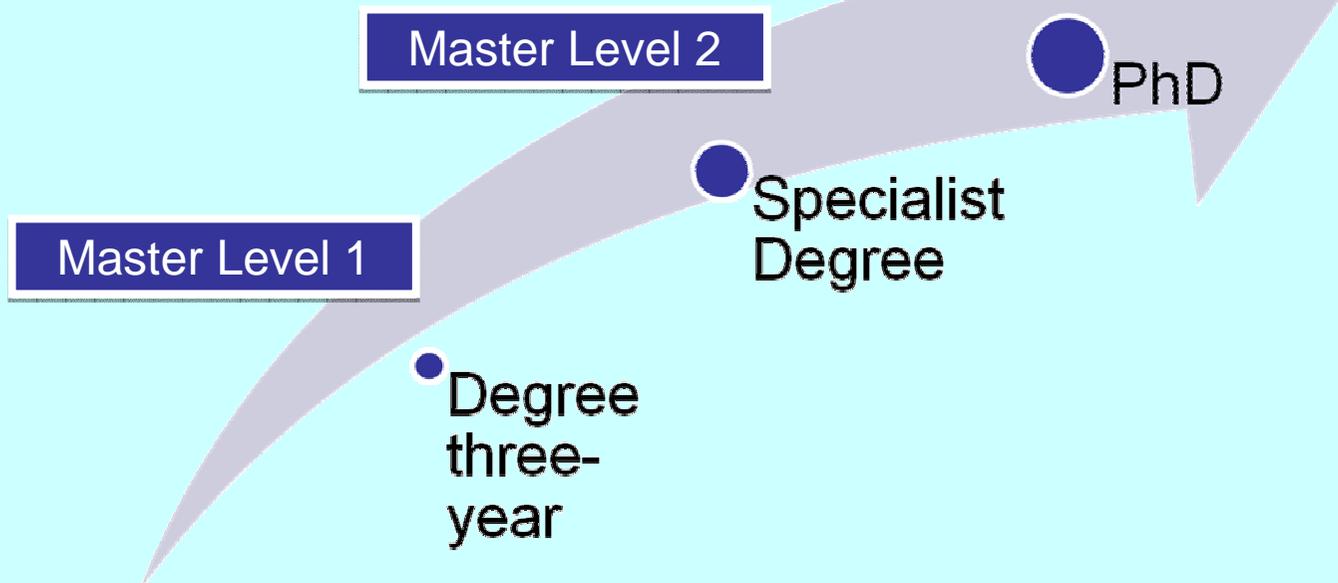
Classe delle lauree specialistiche nelle scienze delle professioni sanitarie tecniche

3

4/S

Classe delle lauree specialistiche nelle scienze delle professioni sanitarie della prevenzione

4



## Master Level 1

The Faculty of Medicine and Faculty of Education, **University of Genova**.  
**Under the Patronage of SIMEU** - Italian Society of Emergency Medicine and Emergency, Liguria Region in 2007 proposed the 'activation Course in "**Qualified expert in Triage**"

The Organization of Teaching courses lasting 6 months leading university credits

The Form 1 - **General for the Triage** - Part I 2.0 Credits (History of triage, communication, evaluation of the adult patient, evaluation of the child, the foreign patient, the handicapped)

The Module 2 - **Triage surgical / trauma** 2.0 CFU (Trauma, apparently penetrating wounds, head injuries increased, medium / mild burns, non-traumatic acute abdominal pain).

Module I 3 - **Triage Medical** C.F.U. 2.0 (Non-traumatic chest pain, fever, dyspnea, digestive bleeding, non-traumatic headache, altered mental status, metabolic and endocrine disorders, palpitations, acute poisoning).

The Form 4 - 1.0 CFU **Triage Specialist** (Patient no psychiatric trauma, eye diseases, disorders ENT (ear pain, sore throat-ipoacusia-epistaxis), Vertigo.

Form I 5 - 1.0 **Paediatric Triage** C.F.U. The module 6 - Triage maxi emergencies / disaster medicine 1.0 CFU (Intra-hospital, non-hospital).

The Form 7 - General for the Triage - Part II 2.0 credits (Medical and legal issues inherent in the triage, containment of the patient. The violent patient. Investigation forensic.)

M • Form 1 - General for the Triage - Part I 2.0 Credits (History of triage, communication. Evaluation of adult patients. Assessment of the child, the foreign patient, the handicapped)

## Who should perform triage ?

"Triage .. this function is performed by trained nurses, who work under the established prothocol by the Medical Director of the service .. " .

## Italian laws and regulations on Triage

State-Regions Conference Session of 22 May 2003; Repertoire Instruments n.1711

State-Region Conference at its meeting on March 13, 2002; Directory Acts n.1667

Agreement between the Minister of Health and the regional and intra-hospital triage of October 25, 2001

Deed of agreement between the State Region, guidelines on organizational requirements and functional network of emergency health emergency pursuant to the Decree of the President of the Republic of March 27, 1992

Decree of the President of the Republic of March 27, 1992

Which makes triage training for nurses?

# Nursing competencies for triage

**EBN**

**RESOURCES  
AVAILABLE**

**Team**

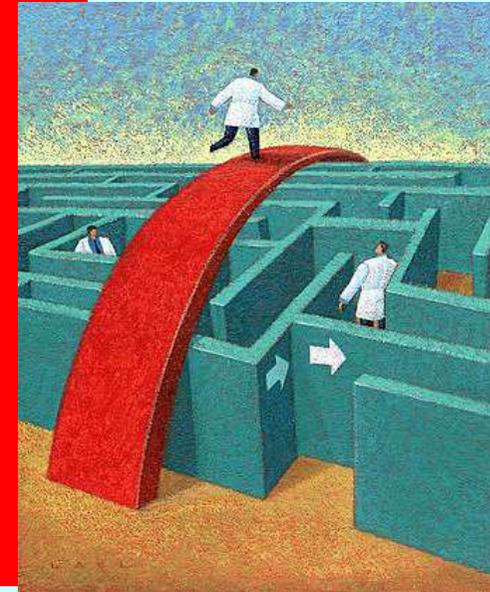
Knowledge

Capacity

Justification

Experience  
(years of operation)

Professional  
recognition



Which kind of triage training for nurses?



*James Reason*

# Scientific method

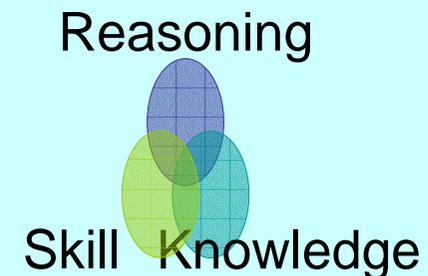
Reasoning  
Pattern recognition  
Repetitive  
Hypothesising  
Mental representation  
Intuition

## Which kind of triage training for nurses?

Decision making is an essential and integral part of medical and nursing practice.

Clinical judgement about patient care requires both thought and intuition, and both of these must be based on professional knowledge and skill.

## Clinical Reasoning



[Triage decision-making skills: a necessity for all nurses.](#)

Smith A, Cone KJ. J Nurses Staff Dev. 2010 Jan-Feb;26(1):E14-

Which kind of triage training for nurses?

## Decision making during triage

Despite all the theories, decision making is quite simply a series of steps to reach a conclusion and consists of three main phases:

- identification of a problem,
- determination of the alternatives,
- selection of the most appropriate alternative.

An approach to making critical decisions has been described which uses the following five steps.

**problems not diagnosis**

AS SCIENTIFIC METHOD TO EVALUATE THE PATIENTS AT TRIAGE WE USE THE MEDICAL DATA AND THE PRIORITY ASSESSMENT BASED ON :

A

AIRWAYS

B

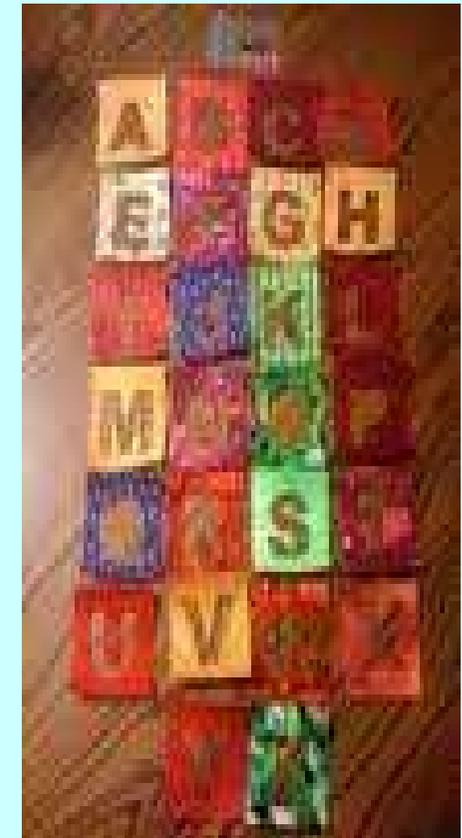
BREATHING

C

CIRCULATION

D

DISABILITY/DRUGS



Which kind of triage training for nurses?

Which kind of triage training for nurses?

## Life threatening

To a Emergency Nurse, the same thinks like the Emergency Physician, life threatening is perhaps the most obvious general discriminator of all.

Broadly speaking this recognises that any cessation or threat to the vital (ABC) functions places the patient in the first priority group.



Which kind of triage training for nurses?

# GENERAL DISCRIMINATORS

The general discriminators are independent of the chief complaint but they can change the waiting - time to admission doctor's visit or nurse fast-track protocols



## Which kind of triage training for nurses?

The general pain discriminator describes the intensity or severity of pain only.

Other characteristics of pain, such as site, radiation and periodicity, may feature as specific discriminators in particular presentational flow charts.

For example:

- Chest pain
- Abdominal pain
- Headache
- Etc

Which kind of triage training for nurses?

**Pain evaluation:**

**O:** onset

**P:** provoke

**Q:** quality

**R:** radiation

**S:** severity

**T:** time

Which kind of triage training for nurses?

## First level triage

LOOK ALL THE PATIENTS ARRIVING AND IDENTIFY IMMEDIATELY THE LIFE THREAT PATIENT WITH ABCD DISCRIMINATORS

## Second level triage

Evaluate each patient:

- ABCD and the difference
- General discriminators (pain, haemorrhage, temperature, vomiting or diarrhoea)
- Chief complaint (primary specific discriminators)
- .....
- History taking (AMPLE) and Risk conditions (hypertension, cholesterol level, smoke, etc) (secondary specific discriminators)

Which kind of triage training for nurses?

## PRIMARY SPECIFIC DISCRIMATORS

When the patient tell so well the chief complaint that the nurse identify clearly the potential disease (like chest pain to coronary artery disease or AMI ), non more information needs.

Nurse define the priority time code to patient.

... But .... If the chief complaint it's not clear the nurse interview continue

## SECONDARY SPECIFIC DISCRIMATORS

A: ALLERGIES

M: MEDICATIONS /DRUG

P: PAST ILLNESS

L: LAST MEAL

E: WHERE HAPPEN AND WHAT THE PATIENT DOING

RISK FACTORS: SMOKE, OBESE PATIENT, DIABETES, ETC

Which kind of triage training for nurses?

## Special conditions

There is a number of issues about the nature of individual patients that affect their management but don't can change the priority admission.

The priority admission is clinical, but the nurses could favorite the admission in this special conditions

Homeless



Pregnancy



Children



Older



Which kind of triage training for nurses?

## Importance of re - triage

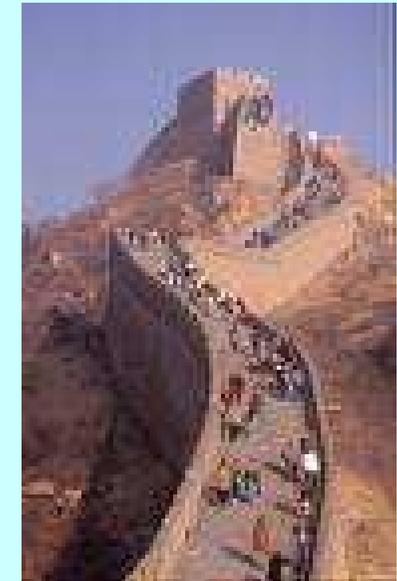
Reassess the patient within time of initial triage and continue to re assess on a regular basis, patients who may have presented without cardinal signs of severe illness may develop them during long waits.

Take home

## Characteristics of triage nurse

- Extensive knowledge to emergency medical treatment
- Adequate training and competent skills, language, terminology
- Ability to use the critical thinker process
- Good decision maker





# Thanks for your attention

***".. The Chinese populaton is a quarter of the human race ... .The whole world will be involved in chinese developement in the next two centuries.. "***  
***Bertrand Russell (written after a visit to China in 1921)***

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